To all whom it may concern:

Be it known that I, JOHN D. OVERHOLT, a citizen of the United States, residing at Wooster, in the county of Wayne and State of Ohio, have invented a new and useful Crib and Bin Ventilator, of which the following is a specification.

My invention relates to improvements in crib and bin structures for housing corn, wheat and other grains, and particularly to improvements in means for ventilating the same, and preventing the heating and molding of such grains while stored in such crib or bin, and to add to the efficiency of my crib and bin ventilating system for which Letters Patent of the United States were issued September 30th, 1919 (No. 1,317,909). The principal object of my present invention is to provide means for regulating the air drafts through the ventilating shaft, and for compelling the air currents to flow into and through the mass of grain while stored in the crib or bin, and for their escape upwardly through the ventilating shaft more rapidly.

Hitherto ventilating shafts have been constructed with a hollow body having numerous perforations for the admission of air thereto, and arranged to stand about centrally within and to extend from the bottom to the top of the crib or bin. And in the patented device above referred to a large air chamber was provided at the bottom of the ventilating shaft to aid in preventing the heating and molding of the grain at the bottom of the crib or bin.

I have also discovered that better ventilation is afforded through the ventilating shaft by limiting the perforations therein to that part which is usually surrounded with the stored grain, but as this portion is subject to frequent changes by the filling and emptying of the crib, I have provided improved means for opening and closing at pleasure the perforations in the ventilating shaft enough of the way down from the top to confine them almost entirely to the part which is immersed in the mass of grain within the crib or bin—all as hereinafter fully set forth, and as stated in the appended claims.

My invention is illustrated by the accompanying drawing in which similar letters and figures of reference indicate like parts.

Referring thereto, the figure is a sectional view of a crib body and ventilating shaft embodying my invention which is shown therein in section upon the ventilating shaft.

In the drawing, A indicates the body of a crib structure, such as I use, B is the roof or cover, and D the bottom or floor thereof; E is the ventilator shaft, F the air chamber at its base, and G the wind-shield above the open top of the shaft—all said members being such as heretofore used, and no claim is made thereto except as specifically stated. H is my novel device for covering and uncovering portions of the ventilating shaft E and perforations therein. It is mounted to slide up and down as a cylindrical sleeve over the surface of said shaft, and is provided with a flanged border at its lower terminus, and an outwardly flared rim h at its upper terminus, and its downward movement may be limited either by said flanged border coming into contact with the mass of grain in the crib or bin, or by means of a peg p inserted in a perforation of the shaft. Means for adjustable lengthening the sleeve member are provided by coupling therewith an upper cylindrical member I in telescopic fashion, by an inwardly flared terminus j adapted to engage the said rim h, as shown in cross section in the figure. The top of said upper member I may be flared inwardly into closer contact with the ventilator shaft, as shown at t, and may be held in any desired position by a peg p', or equivalent means.

It is apparent that when the sleeve H is lowered it will automatically close the perforations of the ventilating shaft to that extent, and that when the flanged terminus a reaches the mass of grain in the crib or bin all the perforations above said mass will be closed, thus making a substantially continuous air draft from said grain mass to the top of the ventilating shaft. Thus also a suction is created through the mass of grain more directly, while the heat thereof escapes upwardly through said shaft E and said enveloping sleeves.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is—

1. In a device of the character described, the combination with a ventilating shaft, having perforations therein, an extensible sleeve mounted to slide over the perforations in said shaft, to open or close the same in either direction longitudinally.

2. In a crib or bin, a ventilating shaft having perforations therein for the admis-
sion of air, in combination with a shiftable sleeve mounted to slide thereon, and comprising portions telescoped together, and capable of extension longitudinally in either 5 direction over the said shaft to cover the perforations therein, substantially as set forth, and for the purpose specified.

3. In a crib or bin, the combination with a perforated ventilating shaft, of a sleeve 10 mounted to slide up and down thereon, said sleeve terminating with a flared rim at its lower end adapted to rest upon the mass of grain in said crib adjacent to said shaft, sub-
stantially as set forth.

In witness whereof, I hereunto set my 15 hand in the presence of two witnesses this 17 day of October, 1919.

JOHN D. OVERHOLT.

Witnesses:

CHARLES C. JONES,
HIRAM B. SCHWARTZ.